DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
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WASHINGTON DC 20374-5065

NAVFACINST 5100.11J
FAC SF
18 January 2000

NAVFAC INSTRUCTION 5100.11J

From: Commander, Naval Facilities Engineering Command

Subj: NAVFACENGCOM SAFETY AND HEALTH PROGRAM

Encl: (1) Safety and Health Program Manual

1. Purpose. To issue policies, procedures and guidelines for carrying out the Safety and Health Program within the Naval Facilities Engineering Command (NAVFACENGCOM). This instruction is a complete revision of NAVFACINST 5100.11H. A summary of changes begins on page iii.

2. Cancellation. NAVFACINST 5100.11H is cancelled.

3. Command Policy.

a. Each Commander, Commanding Officer, and Officer in Charge is the Safety Officer and is personally responsible for preventing accidents and providing safe services/products.

b. Our people come first, and their safety is of primary importance.

c. Facilities we design and construct must be safe for our clients.

d. We will hire quality contractors and ensure they work safely, not only to protect workers, military and civilian personnel, and dependents, but also to minimize disruptions to operations.

4. Responsibility. NAVFACENGCOM provides overall direction, policy and technical guidance on safety and health matters to its Echelon 3 activities and Public Works Centers (PWCs). In addition, NAVFACENGCOM manages the CNO Hazard Abatement Program.

5. Scope. The Command Safety and Health Program has the following basic elements: (1) Occupational Safety and Health, (2) Facility Planning and Design Safety, (3) Contract/ Construction Safety, (4) Environmental Safety and Health, and (5) Asbestos/Lead.

6. Action. Distribution addressees shall implement the policies, procedures and guidance provided in enclosure (1).

L. M. SMITH

Subj: NAVFACENGCOM SAFETY AND HEALTH PROGRAM

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NAVFACINST 5100.11J
18 January 2000

NAVFACENGCOM

SAFETY AND HEALTH PROGRAM MANUAL

NAVFACINST 5100.11J

Naval Facilities Engineering Command
1322 Patterson Ave SE STE 1000
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SUMMARY OF CHANGES

GENERAL

Throughout - Incorporated and/or referenced OPNAVINST 5100.23E requirements vice OPNAVINST 5100.23B. In most cases OPNAV requirements are referenced rather than duplicated in this instruction.

Throughout - Changed NAVFAC Safety Director Code from NAVFACENGCOM 18K to NAVFACHQ SF.

Deleted List of References that are readily available from CNO and/or NAVFAC Safety Web sites.

Throughout - Included Engineering Field Activities (EFAs), Navy Crane Center (NCC), Seabee Logistics Center (SLC) and Naval Facilities Engineering Service Center (NFESC). Deleted Construction Battalion Centers, Naval Energy and Environmental Support Activity, and Naval Civil Engineering Laboratory.

CHAPTER 1

Consolidated Responsibility, Organization and Personnel Safety sections into one section covering Occupational Safety and Health.

Para. 0102.a Clarified that the NAVFACHQ Safety Director reports to the Vice-Commander for policy matters as required by OPNAVINST 5100.11E but organizationally reports to the Deputy Commander for Operations.

Para. 0102. b. (1) Added organizational placement of the safety office at EFAs, NFESC & SLC.

Para. 0102. b. (3) Added requirement for NCC to establish at a minimum a collateral duty safety position reporting to the Executive Officer/Director.

Para. 0102. b. (4) Clarified that the Facilities Safety and Health Office located at PWC Norfolk provides support to NAVFACENCGOM and to CNO N454.
Para. 0103. Added that Commander, NAVFACENGCOM is the Command Safety Officer and the Safety Officer for each EFD, EFA, PWC, SLC, NCC and NFESC is the Commander/ Commanding Officer or Director (NCC) per the Chief's Accident Prevention ltr. of 11 January 99.

Para. 0105. Added Ergonomics Program requirements.

Para. 0107. Revised the Confined Space Entry requirements to comply with 29 CFR Part 1910, 29 CFR Part 1915, and OPNAVINST 5100.23E.

Para. 0108. Added Electrical Safety section to include lessons learned from serious mishaps and incorporate requirements of OPNAV P-45-117-6-98 and MIL-HDBK 1025/10

Para. 0109. Added Fall Protection requirements to comply with 29 CFR Part 1926.

Para. 0110. Revised Mishap Investigation and Reporting requirements for Navy Military/Civilian Personnel to incorporate OPNAVINST 5100.23E requirements. Added procedures for investigating/reporting weight handling equipment mishaps per NAVFAC P-307 and OPNAVINST 5100.23E.

Para 0111. Deleted requirement to conduct OSH Management Evaluations between command inspections. Clarified inspections of PWCs per NAVFACNOTE 5040 dtd 17 September 1999.

Para 0112. Revised process for conducting activity Self-Assessment and development of Improvement Plans.

Para 0113. Identified NAVFACHQ and EFD/EFA/PWC responsibilities for managing the CNO Centrally Managed Hazard Abatement Program.

CHAPTER 2

Changed "System Safety Engineering" (old Section 3) to Facility Planning and Design Safety.

Deleted specific functions, responsibilities and procedures. Deleted requirement for EFDs to have a Planning representative for Safety and a Design representative for Safety.
Deleted specific requirements for developing preliminary hazard analyses.

Para. 0202. Incorporated the Chief Engineer's policy issued in NAVFAC ltr Ser 1765/SF dtd 18 March 1998 and the USD (A&T) Memorandum dtd 11 August 1997.

Para. 0203. Added guidance for Facility System Safety Working Groups per OPNAVINST 5100.23E. Added requirement for EFD/EFA Safety Engineers to conduct follow-up evaluations with facility operators and maintainers to identify any residual safety and health hazards and lessons learned.

Para 0203. c. Added requirement for NFESC to perform design safety evaluations during acquisition of pollution prevention equipment.

Para 0204. b. Added requirement for EFDs, EFAs, NFESC, NCC, SLC and PWCs to have an engineer with sufficient knowledge/skills and expertise in design of fall protection systems.

Para 0205. Added Design Safety Metrics.

Para 0206. Added requirement to perform a comprehensive ergonomic hazard analyses as part of the facility design process as required by OPNAVINST 5100.23E.

CHAPTER 3

Para 0301. Added safety requirements for Base Realignment and Closure as provided in OPNAV P-45-115-95.

Para 0302. Added reference to NAVFAC Guide Specification 01525.

Para 0303. b. Added guidance for considering contractor's past safety and health performance in the selection process

Para 0303. a. (4). Added contract requirements for contractor weight handling equipment per NAVFAC P-307.

Para 0304. Clarified EFD, EFA, OICC competencies in Construction Safety.

Para 0305. Added metrics for EFD, EFA, and PWC Construction Safety.

Para 0306. Revised contractor mishap investigation and reporting per guidance from NAVFAC Counsel. Simplified the report format. Revised the process to recommend that safety reports be provided to the JAGMAN Investigating Officer for inclusion in the JAGMAN report of investigation.

CHAPTER 4

Para 0403. Clarified competencies for NAVFAC personnel managing projects, overseeing contractors or government clean-up operations and for employees involved with hazardous waste/hazardous materials.

Para 0406. Deleted requirement for conducting MIL-STD 882 Hazard Analyses for each environmental project. Added requirement to develop an Activity Hazard Analysis per EM 385-1-1.

Para 0408. Added guidance for Pollution Prevention Equipment.

Para 0409. Added guidance for Underground Storage Tank Removal to incorporate lessons learned from a serious mishap.

Para 0410. Added guidance for Unexploded Ordnance.

CHAPTER 5

Added chapter dealing with Asbestos and Lead. Incorporated guidance developed by the CNO/ NAVFAC/EFD/EFA/PWC/NFESC Asbestos and Lead Working Groups

APPEDICIES

Deleted appendices A through I. Added new appendix A-Definitions.

CHAPTER 1
OCCUPATIONAL SAFETY AND HEALTH (OSH)

0101. POLICY. All levels of command must implement and manage their Navy Occupational Safety and Health Program in accordance with the policies, procedures and actions set forth in OPNAVINST 5100.23 (series). This instruction provides supplemental policy and guidance for NAVFACENGCOM mission unique safety requirements. This instruction applies to personnel assigned to NAVFACHQ and its field activities at all levels. It covers all civilians and foreign nationals and applies to all military personnel.

0102. ORGANIZATION. An office, as shown below, shall be established and maintained to handle safety and health functions.

a. NAVFACHQ SF. The NAVFACHQ Safety Director reports to the Vice-Commander for policy matters but organizationally reports to the Deputy Commander for Operations.

b. Field Activities.

(1) Engineering Field Divisions (EFDs), Engineering Field Activities (EFAs), Naval Facilities Engineering Service Center (NFESC) and Seabee Logistics Center (SLC). EFDs/EFAs/NFESC/SLC shall have a staff office reporting to the Vice-Commander, Commanding Officer or Executive Officer per OPNAVINST 5100.23 (series). The head of the Safety and Health Office shall be a GS/GM Series 803 (Safety Engineer) or Series 018 (Safety and Occupational Health Manager) safety professional.

(2) Public Works Centers (PWCs). PWCs shall have either on the staff of the Commanding/Executive Officer or through a regional command, a safety and health organization staffed and organized per section 303 of OPNAVINST 5100.23 (series).

(3) Navy Crane Center (NCC). NCC shall establish at a minimum a collateral duty safety position reporting to the Executive Officer/Director.

(4) Facilities Safety and Health Support Office. The Facilities Safety and Health Support Office located at Public Works Center Norfolk, Virginia, provides support to NAVFACENGCOM and to CNO N454.

0103. OSH PROGRAM RESPONSIBILITIES. The safety and health of employees is an integral responsibility of Command. Direction and control of the safety and health program must be through the chain of command, with line managers and supervisors being primarily responsible. Program administration and coordination, and providing technical guidance and consultation on safety and health to line managers and supervisors, is a staff function and responsibility of the Command Safety and Health Office. NAVFACENGCOM and each of its field activities shall ensure that requirements in this instruction are fulfilled.

a. Command Safety Officer. Commander, NAVFACENGCOM is the Command Safety Officer.

b. Safety Officer. The Safety Officer for each EFD, EFA, PWC, SLC, NCC and NFESC is the Commander/Commanding Officer, OIC, or Director (NCC).

c. Safety and Health Office. Safety and Health Offices shall fulfill responsibilities established in OPNAVINST 5100.23 (series) and this instruction.

0104. PROFESSIONALISM. Safety professionals must assist line managers in effectively managing their safety and health responsibilities. Once accepted as management team members, safety professionals increase their value to, and influence with, the organization. Safety specialists must strive to improve their capabilities for facilitating effective safety management. Membership, participation and certification in professional safety organizations provide an environment for increasing professional knowledge and management abilities. Safety and health professionals shall be encouraged to seek professional certification such as Certified Safety Professional (CSP), Occupational Safety Professional (OSP), Construction Health and Safety Manager (CHSM), Professional Engineer (PE), etc., in related safety and health fields. Commanders/Commanding Officers should ensure that adequate funding is provided for requisite safety professional development courses leading to professional certification.

a. Safety Manager Expertise. "Right-sizing" of the Navy has created increased safety concerns. There is a greater need for fully qualified and highly competent safety managers and engineers. Safety professionals must be prepared through education, training and experience in construction safety and facilities management safety. To minimize the potential for law suits and criminal action resulting from Command advice or direction from unqualified individuals, Commanding Officers should ensure technical competencies already exist prior to safety manager selection or designation.

b. Safety Manager Qualifications. NAVFACHQ SF should be notified when safety manager/engineer positions become vacant to determine if highly qualified personnel are available. The servicing Human Resource Office should be advised that NAVFACHQ SF will provide upon request, assistance with applicant qualification screening and/or in the ranking/rating process for selection of Safety Managers, Design Safety Engineers, or Construction Safety Managers.

c. Safety Specialist Qualifications. Recommended technical competencies for various pay grades are provided in the "Career Development Program for Safety and Occupational Health and Industrial Hygiene Personnel" (NAVEDTRA 10076 (series)).

0105. ERGONOMICS PROGRAM. Ergonomic related injuries, including back injuries, account for the majority of all Navy injury compensation claims and compensation costs.

a. All NAVFACENGCOM activities shall establish an Ergonomics Program in accordance with the requirements of OPNAVINST 5100.23 (series). Activity Commanders/Commanding Officers shall incorporate ergonomic elements into Command mishap prevention programs.

b. Each activity shall appoint an Ergonomics Program Administrator who shall be responsible for coordinating the program. The program administrator shall receive formal training sufficient to develop and manage a viable and effective ergonomics program.

0106. OCCUPATIONAL HEALTH. OPNAVINST 5100.23 (series) assigns the responsibility for providing occupational health support of Department of Navy activities to the Bureau of Medicine and Surgery (BUMED). All NAVFACENGCOM activities shall establish liaison with their cognizant BUMED servicing activity to ensure that they receive the degree of support necessary to effectively administer their safety and health program. Such program areas include workplace monitoring,

industrial hygiene surveys, medical surveillance, engineering reviews and personal protective equipment support. Where applicable however, activities may designate a qualified person to conduct certain monitoring functions necessary to meet mission needs and/or maintain client responsiveness. These functions include asbestos identification and collection of asbestos breathing zone and clearance samples.

0107. CONFINED SPACE ENTRY. The Confined Space Entry Program shall be implemented in accordance with OPNAVINST 5100.23 (series). Work performed in confined spaces by NAVFACENGCOM activity personnel aboard ships or vessels shall be conducted in accordance with 29 CFR Part 1915. NAVFACENGCOM personnel shall not certify spaces or issue permits for contractor operations, except in extreme emergencies, which must be authorized in writing by the Commander/Commanding Officer. NAVFACENGCOM activities are not authorized to train contractor personnel. Activities must apprise contractors of known hazards, of any procedures implemented for the protection of Navy personnel, and coordinate entry operations with the contractor when both Navy and contractor personnel will be working in or near permit required confined spaces.

0108. ELECTRICAL SAFETY. Guidance for electrical operations is provided in the Electrical Safety Field Guide, OPNAV P-45-117-6-98 and in MIL-HDBK 1025/10 "Safety of Electrical Transmission and Distribution Systems". The field guide is for Navy electrical operations planners, supervisors, workers, and safety personnel. It is a concise guide of electrical safe working practices common to all Navy public works, and reflects current Navy and federal policy for electrical operations. Its use in planning and conducting electrical work in the field at each level within Navy activities will result in overall improved working conditions and reduced risk.

a. Confined/Enclosed Spaces.

(1) Navy activities shall secure, whenever possible, all electrical power prior to start of work in electrical vaults, manholes and other confined or enclosed spaces.

(2) When absolutely not feasible to secure the power for work by Navy personnel in these locations, a comprehensive Standard Operating Procedure (SOP) must be developed and approved by the PWC Executive Officer or the base/station Public Works Officer (PWO).

(3) Each SOP must be developed based upon job hazard analyses which comply with OPNAVINST 5100.23 (series) and all OSHA standards, and address specific required training, work procedures, rescue procedures and equipment, and appropriate Personal Protective Equipment (PPE) such as fire retardant clothing, face shields, electrical gloves, etc.

b. Distribution Systems. Most transmission and distribution work does not need to be accomplished with energized power. Temporary inconvenience to clients may be needed to assure safety of electrical workers and prevent fatal mishaps. However, if work on energized systems is impossible to avoid, approval shall be obtained from the PWC Executive Officer or the base/station PWO after review of the risk management options and the job hazard analysis.

0109. FALL PROTECTION. Each activity shall establish fall protection programs which include identification and elimination of fall hazards, whenever practical, through engineering controls, training for personnel, proper installation and use of fall protection systems, and required rescue equipment and procedures.

0110. MISHAP INVESTIGATION AND REPORTING.

a. Activities shall establish guidelines delineating roles and responsibilities for reporting and investigating all classes (as defined in Glossary of OPNAVINST 5100.23(series) under mishap severity classification) of mishaps. A safety professional, trained in accordance with OPNAVINST 5100.23 (series), shall conduct investigations of all Class A and B mishaps. Personnel assigned to investigate Class C and D mishaps must receive appropriate training in mishap investigation procedures and techniques to enable them to identify causal factors and prepare required reports.

b. The cognizant Safety and Health Office has the responsibility to review all mishap reports for adequacy, to ensure corrective measures are identified and implemented, to submit reports as called for in OPNAVINST 5100.23 (series) and OPNAVINST 5102.1 (series), and to follow-up on recommended corrective actions.

c. A Mishap Review Board, chaired by the Commander/Commanding Officer/NCC Director or Executive Officer, should be convened to review all lost time mishaps. The activity head with advice from the safety manager shall determine which mishaps to review. At a minimum, activities shall review any mishap (listed on OPNAVINST 5100.23 (series) paragraph 1408 "Mishap Reporting Procedures.") that requires submission of a Safety Investigation Report (SIR) to the Naval Safety Center.

d. Mishap recording and reporting requirements for shore on-duty mishaps is covered in OPNAVINST 5100.23 (series). Procedures for recreation, athletics, home safety, military off-duty, motor vehicle, explosives, and diving mishaps are included in OPNAVINST 5102.1 (series). Activities shall provide NAVFACHQ with a copy of all Class B mishaps and near misses.

(1) Each EFD/EFA/PWC/NFESC/SLC/NCC shall analyze their mishap experience and take appropriate corrective actions based on the trend analysis. Foreign nationals on the rolls of the activity shall be included in mishap reporting requirements. EFDs shall consolidate into the summary, mishap data for all their subordinate activities (such as EFAs, OICCs, and Field Offices).

(2) All weight handling equipment (WHE) mishaps shall be investigated and reported in accordance with the requirements of NAVFAC P-307 and OPNAVINST 5100.23 (series).

(3) Near misses shall be investigated and reported in accordance with OPNAVINST 5100.23 (series).

e. Class A Mishap Investigation. Formal investigations, conducted by an appointed accident investigation board, are required for all Class A mishaps which involve the death of one or more Navy (civilian) personnel or hospitalization of three or more persons.

(1) Mishap Investigation Board. Commander, Naval Facilities Engineering Command will designate accident investigation boards for Class A and certain Class B mishaps occurring at NAVFACENGCOM activities per OPNAVINST 5100.23 (series). In addition, if an activity head determines that the complexities of an investigation are beyond the capabilities of the activity, they may request the assistance of NAVFACHQ. The board will normally be chaired by NAVFACHQ SF or PACDIV 00K and include at least one member from the activity Safety and Health Office. Subject matter specialists will be solicited from NAVFACHQ, EFDs/EFAs/NCC/NFESC/PWCs and/or from other Navy activities.

(2) Initial Notification. Each Class A mishap shall be reported to NAVFACHQ 00 and SF within eight hours after occurrence, and in accordance with the reporting procedures outlined in OPNAVINST 5100.23 (series).

(3) Reports. A report of the investigation will be prepared in accordance with OPNAVINST 5100.23 (series).

(4) Follow-Up Action. Activities shall initiate corrective measures and provide progress status reports to NAVFACHQ SF quarterly until completed. NAVFACHQ SF will initiate and coordinate corrective actions required at the NAVFACHQ level, by other Echelon 2 or CNO.

f. Lessons Learned. Dissemination of lessons learned during mishap investigations is critical for the prevention of similar incidents. An "Accident Abstract" should be forwarded to NAVFACHQ SF for all Class B mishaps. NAVFACHQ SF will prepare lessons learned for Class A mishaps.

0111. INSPECTIONS. As established by SECNAVINST 5040.3 and OPNAVINST 5100.23 (series), the safety and health inspection program consists of several levels of inspections, which evaluate the effectiveness of the total safety and health program.

a. Activity Level. Each Safety and Health Office shall schedule formal inspections of all workplaces on an annual basis. High hazard areas shall be identified based upon an assessment of risk, mishap data, etc., and shall be inspected more often, as decided by the activity. However, since the majority of mishaps sustained by PWCs occur on job sites, job site safety inspections shall be made a high priority. Inspection reports shall be issued, posted, and maintained in accordance with OPNAVINST 5100.23 (series).

b. Command Inspections. The NAVFACENGCOM Inspector General conducts inspections of NAVFAC activities once every three years per NAVFACINST 5042.5 (series).

(1) For EFDs, NFESC, NCC, SLC and PWCs, NAVFACHQ SF will participate on NAVFACHQ Inspector General inspections to evaluate NAVFAC core safety functions.

(2) For EFAs/OICCs, the LANTDIV, PACDIV, SOUTHDIV, and SOUTHWESTDIV Safety offices will participate on their Inspector General inspections.

(3) EFD/EFA Safety and Health Offices shall conduct safety and health program management evaluations of their subordinate OICCs, and Field Offices. Copies of reports shall be sent to NAVFACHQ SF for use in determining Command issues, problem areas, etc.

c. Oversight Inspections. The NAVOSH Oversight Inspection Unit (OIU) conducts oversight inspections at activities, under the direction of the Naval Inspector General (NAVINSGEN). Results of NAVOSH OIU inspections shall be reported to NAVFACHQ SF immediately following the inspection debriefing. Copies of all implementation status reports for EFDs/EFAs/NFESC/SLC/NCC/PWCs shall be sent to NAVFACHQ SF.

d. OSHA. Federal OSHA officials and representatives of the National Institute of Occupational Safety and Health (NIOSH) are authorized to enter and inspect Navy workplaces per

the restrictions, procedures, and requirements provided in OPNAVINST 5100.23 (series). Copies of all correspondence from OSHA/NIOSH, any report received as a result of a visit/inspection or other contact, and all related responses shall be forwarded to NAVFACHQ SF and CNO (N454) within 15 days of receipt.

0112. SELF ASSESSMENT AND IMPROVEMENT PLANS. Each EFD, EFA, NFESC, NCC, PWC shall conduct an annual comprehensive self-assessment of the activity safety and health program, identify goals and objectives for continuous improvement, and develop an annual Safety and Health Improvement Plan.

a. Each EFD/EFA/NFESC/NCC/SLC/PWC safety office shall perform a comprehensive self-assessment of the activity safety and health program annually. Based on the results of the self-assessment, a plan of action to address program areas in need of improvement shall be developed and implemented. Activity Safety and Health Policy Councils shall review and concur with self-assessments and improvement plans and shall review the progress achieved in implementing improvement plans at least quarterly. Specific improvement strategies for each area identified as needing improvement shall be developed. For each strategy, measurement standards shall be defined and target completion dates established.

b. A copy of EFD, NCC, SLC, NFESC and PWC self-assessment and Improvement plan shall be forwarded to NAVFACHQ SF by 31 October each year.

0113. CNO HAZARD ABATEMENT.

a. Local Funding. Funding for hazard abatement is primarily the responsibility of the activity. Maintenance and repair funds are generally used for this purpose. The Safety and Health Office at each activity shall maintain an "Abatement Plan." Minimum information and program requirements are outlined in OPNAVINST 5100.23 (series). The plan shall be updated continuously to show new findings and status of corrections or abatements. A summary shall be provided to the head of the activity every six months for review and action as needed.

b. External Navy-Wide Hazard Abatement Program. When hazard abatement costs exceed local funding authority or availability, funding can be requested from the Navy hazard abatement account.

(1) NAVFACHQ Responsibilities. NAVFACHQ SF is the Hazard Abatement (HA) Program Manager for CNO per OPNAVINST 5100.23 (series).

(2) EFD/EFA/PWC Responsibilities. The HA Program has been consolidated to four locations. PACDIV, SWDIV, EFA NW and PWC Washington shall have a project manager (PM) who is thoroughly familiar with the OSHA abatement program and standards, NIOSH criteria documents, NAVOSH program requirements, and National Fire Protection Association (NFPA) Life Safety codes. Having the needed career expertise, an industrial hygienist or safety specialist is recommended as the PM. Any other person must have adequate training and experience to be proficient. The HA PM shall have database and spreadsheet proficiency and knowledge of the DOD budget and execution system. Hazard Abatement Program Managers will establish a hazard abatement process to assist claimants and Naval activities within their area of responsibility with technical expertise, on-site field assistance and funding for the abatement of safety and health hazards.

CHAPTER 2
FACILITY PLANNING AND DESIGN SAFETY

0201. REQUIREMENTS. Facility Planning and Design Safety requirements are provided in DOD 5000.2R, OPNAVINST 5100.23 (series), OPNAVINST 5100.24 (series) and OPNAVINST 3500.39 (series).

0202. POLICY. Safe facilities shall be designed to minimize client injuries and illnesses and resulting FECA claims/costs, and to reduce CNO Hazard Abatement Program backlog. System safety engineering shall be used during (1) the planning and execution for research, development, test and evaluation, (2) acquisition of special equipment or existing equipment undergoing major design changes, (3) the planning and design of facility construction projects and/or major renovation projects, and (4) procurement of pollution prevention equipment or technology. Design safety shall comply with the OPNAVINST 3500.39 (series) Operational Risk Management five step process, ensure that all client safety and health needs are identified, special controls are understood and designed into each project or technology. The process should start with a list of client safety and health concerns.

0203. PROCESS.

a. Facility system safety working groups (FSSWG). Chapter 5 of OPNAVINST 5100.23 (series) recommends that NAVFACENGCOM EFDs/EFAs/OICC establish a FSSWG (or similar group) to review facility designs for new military construction projects to ensure hazards are identified and controlled. Regardless of whether FSSWGs are established or not, EFDs/EFAs will provide leadership to ensure client safety and health controls are identified, evaluated and communicated to the A/E. EFD/EFA Safety Engineers shall ensure that follow-up evaluations with facility operators and maintainers are conducted to identify any residual safety and health concerns/hazards, lessons learned and/or required design criteria improvement.

b. Research and development (R&D). R&D managers at both NAVFACHQ and NFESC shall include system safety engineering as an integral part of program planning, execution, test and evaluation. For any exploratory development task, system safety shall be applied to a level that makes sure that the task itself is conducted in a safe and healthful manner.

c. Equipment. NAVFACHQ, SLC, NCC and field activity procuring offices shall ensure that system safety is used during the acquisition of equipment. During acquisition of pollution prevention equipment, NFESC shall perform, either through in-house effort or contract, design safety evaluations.

0204. COMPETENCIES.

a. EFDs, EFAs, NFESC, SLC and PWCs require safety engineering expertise and program leadership to interface with clients, coordinate FSSWG meetings, track hazard resolution, and conduct design safety evaluations.

b. EFDs, EFAs, NFESC, NCC, SLC and PWCs require an engineer with sufficient structural knowledge/skills, expertise and training in fall protection design and construction to be the designated activity Qualified Person (QP) for Fall Protection. The QP will assist in the design

and/or evaluation of fall protection systems, and assist with the evaluation of work in place, investigation of fall mishaps and in-house training.

c. EFDs, EFAs, NFESC, SLC and PWC require an NFESC trained (or equivalent training as determined by NFESC) industrial ventilation (IV) design engineer to provide guidance to clients and evaluate designs.

0205. METRICS. EFD/EFA safety engineers should collect the following design safety metrics and provide to NAVFACHQ SF quarterly:

a. Number of Post Occupancy Evaluations/Surveys conducted

b. Design Safety Abstracts published (lessons learned)

0206. SPECIAL SAFETY AND HEALTH REQUIREMENTS.

a. Use the NAVFAC Design Safety and Health Guidance to communicate common design information to clients at FSSWG meetings and to develop contractor specifications.

b. Chapter 23 of OPNAVINST 5100.23 (series) requires NAVFACENCOM to:

(1) Perform comprehensive ergonomic hazard analyses as part of the facility design process;

(2) Review plans for new or modified facilities, processes, jobs, tasks, tools, material and equipment to ensure that changes will reduce or eliminate ergonomic risk factors for work related musculoskeletal disorders and,

(3) Develop and implement a Navy-wide program to minimize ergonomic stress through facility design, equipment selection and facility, equipment and tool maintenance.

c. Engineering staffs responsible for planning, designing, or writing specifications for equipment, tools, jobs, tasks and processes are required by OPNAVINST 5100.23 (series) to receive formal training in methods of eliminating or reducing ergonomic risk factors for work related musculoskeletal disorders as well as body mechanics. Appropriate training shall be provided to engineers and others on ergonomic design principles and techniques.

d. EFD/EFA interior designers play a key role in ensuring that clients are provided with ergonomically correct work places. Interior designers should be advisors to FSSWGs and be consulted on all projects involving administrative, housing, and BEQ/BOQ facilities. It is important to use life cycle costing rather than single acquisition costs to properly select and procure office furniture, equipment, workstations, etc.

e. EFD/EFA/PWC/SLC will design facilities and equipment to ensure new indoor air quality problems are not created and/or to reduce/eliminate existing air quality problems. Use local BUMED industrial hygiene personnel to evaluate client facility problems that are beyond EFD/EFA/PWC/SLC capability to resolve. Contact the Navy Environmental Health Center in Norfolk, VA in accordance with section 3002 of OPNAVINST 5100.23 (series).

CHAPTER 3
CONTRACT/CONSTRUCTION SAFETY

0301. REQUIREMENTS. Requirements for construction safety are provided in 29 CFR Part 1910 & Part 1926, DOD 6055.1, SECNAVINST 5100.8, OPNAVINST 5100.23 (series) and EM-385-1-1. Additional safety requirements for Base Realignment and Closure (BRAC) are provided in OPNAV P-45-115-95 "CNO Safety and Health Guidance for Base Realignment and Closure" and in NAVFACINST 11000.4 (series).

0302. POLICY. Use of EM 385-1-1, FAR Clauses, and NAVFAC Guide Specification (NFGS) 01525 standards/requirements in contract documents and hiring of high quality safe contractors minimizes disruption of client operations due to mishaps. Lesson learned through investigation of contractor mishaps helps prevent future occurrences of similar mishaps. Periodic project safety oversight should be performed as necessary to ensure compliance with contract requirements but periodic safety inspections of contractor worksites are the responsibility of the contractor. OSHA citations issued to a contractor are the responsibility of the general or prime contractor. OSHA multi-employer worksite citations are not Navy responsibility.

0303. PROCESS.

a. Contract Provisions.

(1) Accident Prevention. The FAR clause 52.236-13, *Accident Prevention*, shall be inserted in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount exceeds the simplified acquisition threshold. The clause should be inserted in construction contracts or dismantling, demolition, removal or improvements contracts under the simplified acquisition threshold. If the contract involves work of a long duration or hazardous nature, the contracting officer shall use the clause with its Alternate I. In addition, contracts for demolition, repair or renovation shall include NFGS 01525, "Safety Requirements."

(2) Hazardous Materials. Use FAR clause 52.223-3, *Hazardous Material Identification and Material Safety Data*, whenever hazardous material will be brought onto Navy property.

(3) Facilities Services. NAVFAC activities that write or contract for facility services shall use the latest version of the NAVFAC Guide Performance Work Statements (GPWS) and incorporate FAR clause 52.236-13 when appropriate.

(4) Weight Handling Equipment. For weight handling equipment, appropriate sections of NAVFAC P-307 dealing with contractors shall be incorporated into contracts and complied with for operation, maintenance, certification and accident reporting. Contracts for the procurement or repair of WHE/Cranes shall contain safety Data Item Descriptions (DIDs) and safety Contract Data Requirements (CDRLs) listed below:

DID: ACCIDENT PREVENTION PLAN (APP)
DID: CONTRACTOR SIGNIFICANT INCIDENT REPORT (CSIR)
CDRL: ACCIDENT PREVENTION PLAN
CDRL: CONTRACTOR SIGNIFICANT INCIDENT REPORT
CDRL: ACTIVITY HAZARD ANALYSIS

CDRL: CRITICAL LIFT PLAN
CDRL: EQUIPMENT INSPECTION RECORDS
CDRL: CRANE OPERATOR'S PRACTICAL OPERATING EXAMINATION RECORDS
CDRL: INSTALLATION CRANE CERTIFICATE OF COMPLIANCE

b. Contractor Selection. Contractor's past safety and health performance should be obtained and be included as an element or subfactor of Past Performance Evaluation or Management Approach. In the Pre-Award Information Section, each offeror may be requested to provide: (1) Their OSHA incidence rate for last three years; (2) OSHA severity rate for the past three years; (3) Experience Modifier Rate (EMR) for the state in which the work is to be accomplished, for the current year and past two years; (4) Federal or State OSHA citations for last three years, and (5) Offeror's safety and health quality control program. If the selected contractor has an EMR greater than 1.2 (20% insurance premium) and/or an incidence rate higher than 5.0, the Contracting Officer should consider a special meeting, prior to start of work, to have the contractor explain how they intend to maintain an accident free work site. In addition, a full time safety professional or 3rd party construction safety competent person may be required.

0304. COMPETENCIES.

a. Each EFD/EFA/OICC requires a Safety Manager and/or Construction Safety Manager (CSM) who is competent in the OSHA and Army Corps of Engineers construction safety disciplines. The CSM should keep the Commander/Commanding Officer/Executive Officer appraised on a regular scheduled basis of construction safety issues, and advise Field Office Contracting and Construction personnel of appropriate safety and health requirements, hazards and corrective measures.

b. A member of each Field Office should be assigned collateral duties as a safety coordinator and complete appropriate competency training. The safety coordinator is responsible for working with the cognizant EFD or EFA Safety Manager and/or CSM to ensure safety and health requirements and resources necessary for Field Office staff (e.g. training, personal protective equipment, workplace inspections, appropriate medical surveillance examinations, contract review) are provided.

c. Contracting Officers, and their authorized representatives, shall review and accept, as appropriate, the contractor's Accident Prevention Plan (APP) and/or Activity Hazard Analysis (AHA), discuss identified hazards and their control with the contractor before start of work; assure that the contractor updates the AHA before each activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform work; and ensure contractor compliance with safety and health provisions identified in the contract.

d. ROICCs, AROICCs, REICCs, Construction Representatives and all technical field staff shall receive 3-levels of contract/construction safety training: on-the-job training; the NAVFACENGCOM Construction Safety and Health Correspondence Course; and formal classroom training related to safety and health. EFDs/EFAs shall create, document and follow a process to assure that all personnel responsible for developing and compiling contract documents do not omit required safety provisions and clauses. This may require that Contracting Officers, Contract Specialists, Design Project Managers/Engineers and/or Environmental Project

Managers/Engineers receive similar safety training to that of the ROICCs, AROICCs, REICCs, Construction Representatives and technical field staff.

0305. METRICS. EFD/EFA/PWC CSM or Safety Manager should maintain the following metrics and provide quarterly reports to NAVFACHQ SF:

a. Number of fatal and serious mishaps for contractors
b. Contractor work-hours
c. Incidence case rate for contractors

0306. CONTRACTOR MISHAP INVESTIGATION AND REPORTING. For contracts involving construction, demolition, alteration, maintenance, repair and services (including CLEAN, BOS, JOC, SOC, TOC, BRAC, FSCC, ERN, etc.), where QA and/or project management services are provided by NAVFACENGCOM personnel, the contractor shall be required to provide to the Contracting Officer a Contractor Significant Incident Report (CSIR).

a. Recordable Mishaps. Any contractor occupational injury or illness that results in a lost workday case, or non-fatal case as defined by this instruction, Appendix A, shall be investigated and a CSIR form submitted by the prime contractor to the Contracting Officer. The Contracting Officer shall ensure that an appropriate NAVFAC investigation is completed and the information is entered into the FAIR database via the NAVFAC Safety Web page. The CSM or cognizant Safety Manager shall review the report and determine if further investigation is warranted. In addition, the CSM or cognizant Safety Manager shall complete appropriate sections of the CSIR.

b. Initial Notifications. Contractors shall be required to report serious mishaps (contractor mishap involving a fatality or the hospitalization of three or more workers; or property damage in excess of $200,000) to the Contracting Officer within eight (8) hours. In addition, the contractor shall report all lost workday mishaps (those mishaps that result in a lost workday) to the Contracting Officer within 24 hours. Contracting Officers shall notify their Safety and Health Office of any serious or high visibility contractor mishaps. The Contracting Officer shall submit a message, e-mail, or fax to the EFD/EFA, PWC, CSO, SLC, NCC, NFESC Safety and Health Office (with a copy to NAVFACHQ SF & SF4) within 24 hours of all serious and/or high visibility mishaps.

c. Serious Mishap Investigation/Reports. Serious mishaps shall be investigated by the EFD/EFA Construction Safety Manager or by a Qualified Mishap Investigator from the cognizant Safety and Health Office. An executive summary and complete CSIR with photos shall be completed and entered into the FAIR database via the NAVFAC Safety Web page within 45 days.

d. Weight Handling Equipment Mishaps. Contractor mishaps involving WHE (including cranes and crane rigging gear) shall be investigated and reported to the Navy Crane Center per NAVFAC P-307. Contractor WHE mishaps need not be reported directly to the Naval Safety Center unless required by Chapter 14 of OPNAVINST 5100.23 (series).

e. Manual of the Judge Advocate General (JAGMAN) Interface. Under most circumstances, any mishap onboard a naval installation that results in personal injury or damage to property requires a preliminary inquiry to determine if a JAGMAN investigation is required in addition to a mishap investigation (See JAGMAN Chapter II). If there is evidence of criminal activity, a criminal investigation may also be initiated. Safety Managers or CSMs should inform command counsel of mishaps that involve contractor personnel and/or equipment, as early as

practicable and should work closely with command counsel and, where appointed, JAGMAN Investigating Offices to minimize duplication of effort and to ensure consistency of findings. Under most circumstances, copies of CSIRs should be provided to the JAGMAN Investigating Officer for inclusion in the JAGMAN report of investigation.

CHAPTER 4
ENVIRONMENTAL SAFETY AND HEALTH

0401. SCOPE. This section deals with NAVFACENGCOM environmental cleanup projects and environmental technologies, i.e., management and control of hazardous materials, and other related functions.

0402. RESPONSIBILITIES.

a. Cognizant EFD, EFA, NCC and NFESC Safety and Health Managers will assist the Environmental Department in providing appropriate training courses and maintaining documentation in accordance with OPNAVINST 5100.23 (series).

b. The EFD/EFA Safety Engineer responsible for facility planning and design will assure environmental projects have appropriate hazard control lists and analyses (conducted by an A&E or in-house) and resolution of high risk hazards.

c. EFD/EFA Construction Safety Managers will provide safety and health compliance services to support Field Offices.

0403. COMPETENCIES.

a. NAVFAC personnel responsible for managing projects, overseeing contractor or government clean-up operations and employees involved with hazardous waste/hazardous materials shall have the appropriate Title 29 CFR Part 1910.120 and 29 CFR Part 1910.1200 (HAZCOM) training **BEFORE** any fieldwork is started. This training will help ensure compliance with all safety, health, and environmental regulations and educate personnel on how to protect themselves. Supervisors are responsible for ensuring all employees receive required training.

b. All unescorted personnel visiting field sites who inspect or view the contractor's work, or who write and/or monitor environmental contracts requiring the use of FAR Clause 52.236-13, shall successfully complete the NAVFAC Construction Safety and Health Correspondence Course. This course will familiarize personnel with the use of the US Army Corps of Engineers Safety and Health Requirements Manual, EM-385-1-1.

c. All personnel, who are expected to respond to hazardous chemical emergencies, and/or who are assigned work at hazardous waste operation sites for which there is no objective analytical data to determine that personnel exposures to chemicals are within, or reasonably expected to be within, OSHA permissible exposure limits, must receive a minimum of 40 hours off-site classroom training and 24 hours on-the job training per 29 CFR Part 1910.120 (HAZWOPER). Supervisors of the above personnel must receive the same level of training, in addition to any unique supervisory/management training. Objective analytical data for characterizing personnel exposures must be consistent with the protocols identified in OPNAVINST 5100.23 (series). All personnel, regardless of assignment, shall receive hazard communication training per 29 CFR Part 1910.1200 (HAZCOM) prior to assignment.

d. CD ROM training can be used as supplemental information but is not a substitute for formal classroom instruction.

0404. MATERIAL SAFETY DATA SHEETS (MSDSs). MSDSs must be available at all locations and job sites where hazardous materials exist. Employees shall be trained in the use of MSDSs as required by 29 CFR Part 1910.1200 and OPNAVINST 5100.23 (series). ROICCs and other contracting representatives shall ensure that contractors provide copies of MSDSs for all hazardous materials to be brought onto Navy property.

0405. CONTRACTS. Prior to facility demolition or renovation, environmental issues need to be considered. Surveys shall be conducted to identify, screen, and/or test for asbestos containing materials and lead-based paint. Each NAVFACENGCOM activity shall ensure contracts involving environmental work include appropriate statements of work, ensure hazard control techniques are properly applied, and all safety and health requirements are addressed.

0406. HAZARD ANALYSIS. As part of the Accident Prevention Plan per EM 385-1-1 an Activity Hazard Analysis (AHA) will be performed for each environmental cleanup project. The AHA will be reviewed and accepted by the ROICC/CSO with technical support from the EFD/EFA Safety Manager or CSM.

0407. HEALTH AND SAFETY PLANS (HASPs). Complete, accurate, and site specific HASPs are required to prevent exposures to chemical and physical hazards, and to prevent "construction safety" mishaps during environmental cleanup projects.

a. Content. Plans shall provide site-specific safety and health requirements for performance of work to include at a minimum; hazard analysis, work-area control specifications, monitoring, training, medical surveillance, personal protective equipment, and emergency response and contingency requirements.

b. Scheduling. Each NAVFACENGCOM activity shall ensure that plans are reviewed and accepted prior to issuing the Notice to Proceed.

c. Reviews. All HASPs shall be reviewed prior to initiating site work by a competent person. Competent person shall mean a certified industrial hygienist or equivalent by training and/or experience. In addition, an EFD/EFA Construction Safety Manager or designated representative, who has sufficient knowledge and authority to review and accept construction safety procedures shall review HASPs for construction safety requirements.

d. Navy Environmental Health Center (NEHC). NEHC is funded to assist Navy activities in reviewing the worker health related aspects of HASPs and environmental risk assessments for the Navy environmental program.

0408. *POLUTION PREVENTION (P2) EQUIPMENT AND NEW TECHNOLOGIES*.

a. P2 equipment and other new equipment technologies shall have a safety and health review prior to using in-house and/or sending to clients for field trials or use. No equipment will be provided to clients without a review and without proper safeguards.

b. Technical Safety Data Sheets (TSDS). Each new P2 equipment or P2 technology will have a TSDS posted near each operation. The TSDS should be provided by the procuring activity. All P2 equipment and technologies procured by a NAVFAC activity will have the TSDS reviewed by

the safety manager. The TSDS will use the technical safety worksheet checklist for the evaluation process.

0409. UNDERGROUND STORAGE TANK REMOVAL. Commanders/Commanding Officers of EFDs/EFAs/PWCs/NFESC shall ensure that actions involving tank removals comply with health and safety requirements of EM 385-1-1 Section 28, 29 CFR Part 1926 Subpart P, 29 CFR Part 1910.120, OPNAVINST 5100.23 (series) and NFGS-02115. Tank removal operations, whether conducted by government personnel or by contractor, shall be planned and conducted to preclude injury to personnel and accidental damage to the environment.

0410. **UNEXPLODED ORDNANCE (UXO)**. If DOD land is contaminated with, or suspected of being contaminated with UXO, or UXO is to be released outside of DOD control, cleanup plans shall be sent to the DOD Explosives Safety Review Board for review and approval. Chapter 12 of DODINST 6055.9 (series) provides requirements.

CHAPTER 5
ASBESTOS/LEAD

0501. SCOPE. This section deals with the identification, evaluation and abatement of asbestos and lead paint removal hazards during facility renovation/demolition projects for clients, and compliance with health and environmental protection standards and control measures contained in OPNAVINST 5100.23 (series), and Title 29 CFR Parts 1910 and 1926.

0502. RESPONSIBILITIES.

a. Each EFD/EFA, PWC, SLC, NFESC shall have a designated Asbestos Program Manager (APM) and a Lead Paint Manager (LPM) either on staff or through written agreements with the host and/or regional command. Notify NFESC Code 425 of the name, phone number and training qualifications of designees by 1 October each year.

b. EFD/EFA/PWC Safety and Health Managers shall provide professional, technical, and training assistance to the APM and LPM. In addition, safety and health professionals should as part of routine workplace inspections, evaluate the condition of known asbestos containing materials, material labeling, and abatement actions.

c. EFD/EFA/PWCs shall ensure that project designers who develop and design asbestos and lead paint removal projects are trained and accredited per OPNAVINST 5100.23 (series).

d. EFD/EFA/PWCs shall assign key individuals to manage abatement projects, ensure that appropriate personnel are trained and accredited as Asbestos/Lead Workers or Contractor/Supervisors, as appropriate, and coordinate projects with the APM/LPMs.

e. EFD/EFA/PWC Asbestos Program Managers serve as the day-to-day coordinator of asbestos related activities and must ensure effective communications within their own Command and with other field activities within their area of responsibility on asbestos matters. Responsibilities include:

(1) Ensure building occupants and maintenance personnel are informed of the location of asbestos-containing materials (ACM) and methods of how and why to avoid disturbance;

(2) Ensure periodic surveillance and evaluation of the condition of material is performed;

(3) Ensure updated facility/building survey records are maintained;

(4) Provide input to the work request system to indicate when ACM will be disturbed during in-house or locally contracted maintenance, alteration, and repair activities;

(5) Assist in project reviews and designs;

(6) Investigate asbestos incidents and provide lessons learned to NFESC Code 425;

(7) Keep the Commander/Commanding Officer informed of program direction, gaps, key elements and status;

f. Building/Facility Owners. Major tenant building and facility owners are responsible for determining the presence, location and quantity of ACM and/or presumed asbestos-contaminated material (PACM) at the work-site and informing employers and employees about the presence of ACM and PACM.

0503. ASBESTOS TRAINING.

a. APMs shall receive training, which meets the criteria of the Environmental Protection Agency (EPA) "Asbestos Model Accreditation Plan," and be accredited as a Project Designer, Management Planner, and an Inspector. State and local jurisdictions may have additional licensing and/or certification programs that exceed the EPA training. Appendix 17-1 of OPNAVINST 5100.23 (series) identifies required training/accreditation requirements for EFD/EFA, PWC and NFESC engineers, planners and estimators, inspectors, abatement workers, and others.

b. Project Designers: Per EPA's model accreditation plan project designer accreditation is required for personnel who specify the type of controls necessary to abate asbestos. If supervisors/branch heads are completing this work then they are also required to have the training.

c. Each Field Office will have a "Competent Person" for asbestos and for lead paint that understands the safety, health, and quality assurance requirements to ensure quality client work. The competent person is required to pass the required EPA, state or local training requirements and be able to validate contractor abatement work and respond to client issues. A minimum competency of asbestos project monitor is required.

0504. ASBESTOS MANAGEMENT PROGRAM AHSORE. Asbestos Management Program Ashore consists of the following elements: operations and maintenance program, survey and material assessment, and design and abatement. Appendix 17-C of OPNAVINST 5100.23 (series) provides guidance.

0505. ASBESTOS THIRD PARTY MONITORING.

a. State and local regulations and statutes shall be researched to determine whether an independent (third party) monitoring firm must be retained by the Navy during construction. NFGS 13281 identifies the independent monitor as the Navy consultant and the contractor hired monitor as the private qualified person. When not required by law, use of third party monitoring on high profile, high priority renovation projects that impact large amounts of friable asbestos is highly recommended.

b. If the Field Office competent person will not enter a contaminated enclosure, then an independent third party, not paid by the general/prime or abatement contractor, will be needed to validate the abatement contractor compliance. The EFD/EFA/PWC asbestos program manager shall assist Field Offices with establishing independent third party capability.

0506. LEAD PAINT REMOVAL STANDARDS/GUIDANCE.

a. Title 29 CFR Part 1926.62 applies to all construction activities including renovation, alteration and repair work, including painting and decorating, and maintenance operations associated with construction. Included are requirements addressing exposure assessment, methods of compliance, PPE, medical surveillance, training and hygiene facilities and practices.

b. OPNAVINST 5100.23 (series) provides specific guidance for Navy personnel to prevent lead-related injuries/illnesses during the use, handling, and removal of materials containing lead.

c. NFGS 13283, "Removal and Disposal of Lead-Containing Paint" provides requirements and procedures for limiting occupational and environmental exposure to lead when removing lead based paint by contract.

d. During construction activities, personal airborne levels of lead are taken to determine worker exposure. However, after construction activities are completed, area airborne lead levels as well as area dust wipe sampling are recommended for clearance purposes.

e. Maximum area lead dust clearance levels of 200 micrograms per square foot at non-housing/non-child occupied facilities are recommended to ensure lead hazards were removed during construction activities. A lead paint competent person should determine the locations and number of wipe samples to take for monitoring construction activities or area clearance. Pre-work sampling should be conducted to eliminate any pre-existing conditions from the final results. This is most important for clearance samples taken from interior window sills and troughs that were not part of the construction. Additional sampling guidance is contained in the U. S. Department of Housing and Urban Development guidelines for the evaluation and control of lead based paint hazards in housing.

f. Dust wipes must be sent to a laboratory recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP), and accredited by the American Association for Laboratory Accreditation (AALA) or the American Industrial Hygiene Association (AIHA) and successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program.

APPENDIX A

Definitions

1. Cognizant Safety and Health Office - EFD/EFA/Independent OICC/CSO/PWC/ NFESC/SLC/NCC Safety and Health Office.

2. Facility Accident and Incident Reporting (FAIR) – FAIR is a computer database system used for reporting, tracking, and analyzing facility related mishaps resulting in injury or death to personnel, and/or damage to equipment and/or property.

3. Lost Time Injury - Any injury or illness which results in a loss of time from work beyond the day or shift on which it occurred.

4. Lost Workday Case - Injuries other than fatalities, that result in a lost workday.

5. Non-Fatal Case - Mishap case without lost workdays which results in transfer to another job or termination of employment, or requires medical treatment (other than first aid) or involves property damage in excess of $10,000 but less than $200,000 or involves: loss of consciousness or restriction of work or motion. This category also includes any diagnosed occupational illnesses, which are reported to the employer but are not classified as fatalities or lost workday cases.

6. High Visibility Mishap - any mishap which may generate publicity and/or high visibility.

7. Near Misses - Any near miss involving an industrial work process where activities avoid a fatality or catastrophic loss merely by chance.

8. Qualified Mishap Investigator - Person who has successfully completed a NAVFACENGCOM approved accident investigation course.

9. Recordable Mishap - Any mishap which results in a "Recordable Occupational Injury or Illness."

10. Recordable Occupational Injury or Illness - Any contractor occupational injury or illness that results in a serious mishap, lost workday case, or non-fatal case as defined by this instruction.

11. Serious Mishap - Any contractor mishap involving a fatality, regardless of the time between the injury and death, or the length of the illness; or the hospitalization of three or more workers; or property damage in excess or $200,000.